

***Remarks***

Reconsideration of this Application and entry of this Amendment after Final are respectfully requested. This amendment addresses the patent reference cited by the Examiner in the final office action. Additionally, the proposed amendment places the claims in better form for appeal.

Upon entry of the foregoing amendment, claims 18, 21-24 and 30-32 are pending in the application, with 18 and 30 being the independent claims. Claim 18 is sought to be amended. Claims 1-17, 19, 20 and 25-29 are canceled without disclaimer of or prejudice to the subject matter thereof. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

***Indication of Allowable Subject Matter***

Applicants acknowledge and appreciate the Examiner's indication that claims 30-32 are in condition for allowance. With the above amendment, Applicants believe that the remaining claims in the application are also in condition for allowance.

***Rejections under 35 U.S.C. § 102***

The Examiner rejected claims 18 and 21-23 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,108,956 to Lee. Particularly, the Examiner stated that Lee discloses the method of independent claim 18 including "solidifying melt immediately upstream of the valve pin to form a slug to create a seal between the melt [source] and the gate passage (Column 6, lines 63-65); and removing the valve pin from

the nozzle melt channel to return the valve pin to the open position after forming the seal between the melt source and the gate passage (Column 6, line 68; Column 7, lines 1-3).” Office Action pp. 2-3.

Applicants respectfully traverse the Examiner’s rejection. Applicants have amended independent claim 18 to clarify that in the step of removing the valve pin from the nozzle melt channel to return the valve pin to the open position the slug formed in the step of solidifying melt immediately upstream of the valve pin is left behind to seal between the melt source and the gate passage. The amendment to claim 18 is supported by disclosure found in the specification, *inter alia*, on page 9, paragraph [0049]. In Lee, pin valve **150** is shown in FIG. 5 positioned in the extended position within flow passage **135** to block the flow of plastic material (col. 6, lines 31-36) and is retracted to the position in FIG. 4 only after the molded part is cured, ejected and the mold core pins reinserted into the mold cavity (col. 6, lines 45-51). Thus, extended pin valve **150** within flow passage **135** provides the “seal” between the melt source and the gate passage. This sealing functionality of pin valve 150 is the same even when it includes grooves **158** that allow plastic to be trapped and cooled around a tip of pin valve **150** within gate passage **135**, except that pin valve **150** also remains in the extended position shown in FIG. 5 until the plastic in grooves **158** is remelted (col. 6, line 63 - col. 7, line 3). Accordingly, the apparatus of the Lee patent does not include forming a slug downstream of the valve pin that is left behind to seal between the melt source and the gate passage once the valve pin is removed. As such, claim 18 is not anticipated by and is patentable over the Lee patent.

Claims 21-23 depend from and add further features to independent claim 18 and are patentable for this reason alone. While it is not necessary to address the Examiner's rejection of the dependent claims at this time, Applicants reserve the right to support their patentability, when necessary.

***Rejections under 35 U.S.C. § 103(a)***

The Examiner rejected claim 24 under 35 U.S.C. § 103(a) as being unpatentable over the Lee patent. Office Action p 4. The Examiner states that although Lee does not teach using a plurality of mold cavities and a plurality of gate passages that it is known that duplication of parts does not necessarily hold any patentable significance unless a new or unexpected result is produced. The Examiner stated it would have been obvious to apply Lee's methodology to an apparatus having a plurality of mold cavities and gate passages to increase output. Office Action p. 4.

Claim 24 depends from and adds further features to independent claim 18 and is patentable for this reason alone. While it is not necessary to address the Examiner's rejection of the dependent claim at this time, Applicants reserve the right to support its patentability, when necessary.

***Conclusion***

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will

expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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